Does Tobacco-smoking Injure the Eyesight?

See page 46.

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EDITED BY DR. ANDREW WILSON, F.R.S.E. &C.

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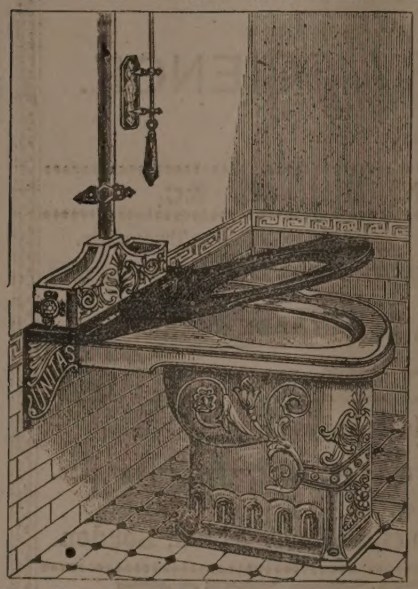

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◆ HEALTH ◆

EDITED BY

DR. ANDREW WILSON, F.R.S.E., &c.

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Notes by the Way

BY THE EDITOR.

'Health is the foundation of all our physical happiness."—*Herder*.

THE special qualities of onions have formed matter of much dispute and controversy, and it may therefore prove interesting to my readers if I summarize a recent report regarding the uses of these familiar vegetables in the domestic *Materia Medica*.

✣ ✣ ✣

FOR a cold on the chest there is said to be no better specific, for most persons, than well boiled or roasted onions. They may not agree with every one, but to persons with good digestion they will not only be found to be a most excellent remedy for a cough, and for the clogging of the bronchial tubes which is usually the cause of the cough, but if eaten freely at the outset of a cold, they will usually break up what promised, from the severity of the attack, to have been a serious one. A writer in a medical journal recently recommended the giving of young raw onions to children three or four times a week, and when they get too large and strong to be eaten raw, then boil and roast them, but not abandon their free use.

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ANOTHER writer, advocating their use, says: During unhealthy seasons, when diphtheria and like contagious diseases prevail, onions ought to be eaten in the spring of the year at least once a week. Onions are invigorating and preventive beyond description. Personally, I believe the onion to be a very excellent vegetable. It contains much sulphur, and may be regarded as a blood-purifying food in its way.

✣ ✣ ✣

A RUSSIAN investigator has lately noted that the activity of the saliva does not vary greatly in healthy persons, but that when people are in bad health the mouth-fluid has a very perceptibly diminished power of digesting starch. When starchy foods are well cooked they are more easily digested. Hence invalids should always be given starchy substances in a thoroughly cooked state. "Rice and peas were found to require three hours' cooking in order to render them as easily digested in the saliva of a badly nourished person (which had previously been found to possess only 88 per cent. of the normal activity), as they were with a single hour's cooking by the saliva of healthy persons; and generally it was found that in the case of weakly or diseased persons starchy food must be cooked twice or thrice as long as in the case of healthy persons in order that it might be equally acted upon." It is also added that when starch has been long cooked there is less difference noticeable between the effect of healthy and unhealthy saliva upon it. After one hour's cooking, millet "showed a difference of 12·89 per cent. in favour of the saliva of healthy as against that of diseased persons, but after three hours' cooking a difference of 5·77 per cent. only."

✣ ✣ ✣

EVERY voyager knows the curious interruptions in the regularity of breathing which accompany the motion of a vessel. Recently, Dr. J. J. Leiser contributed to a medical journal some most interesting observations on sea-sickness and its relations to the regulation of breathing-movements. He says: "On a recent voyage across the Atlantic, I made some observations on the matter of sea-sickness. It was evident to me, first, that respiration (or breathing) was imperfect; it was governed by the motions of the boat. One not used to the sea, and the same with him not used to a high sea, holds his breath as the ship is tossed up or down, catching it only at the turns, or, if the waves are great, only gasping for it. Thus are the respirations infrequent and imperfect, with very apparent results. The blood so inadequately aërated must necessarily be poisonous to the brain, and the sympathetic sickness is quite understandable. The experiment I made seemed to prove that the irregular respiration was not secondary to the sickness. A system of regular, free breathing prevented sickness, or rapidly

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relieved it. One must sit and give his attention to it, must breathe to time, with full and regular inspirations and expirations."

◆ ◆ ◆

Dr. Leiser gives a letter from Dr. Stockman and Dr. Prentice, who repeated his experiments. The letter details that "after leaving Queenstown on Sunday, we passed into a very heavy sea. So disagreeable was the roll that the meals were almost deserted. According to promise, we took the opportunity to experiment on your theory of sea-sickness. The ship's surgeon only smiled at our suggestions, he having heard scores of cures that proved invariably valueless. Nevertheless, we went to work and secured ten unfortunate individuals whose gastric regions were going through convulsive contortions, and making their lives miserable. We seated our patients on deck, on the fore part of the ship, where the pitch was most considerable. Dr. Prentice seated himself with five, and I took the other five under my care. We timed the breathing in the following manner. We raised the hand from the knee, indicating an inspiration, and down again for an expiration. We had a quarter second stop watch, and timed the respirations to exactly twenty per minute.

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"At the expiration of one hour, all the active symptoms in each case had entirely subsided. Of course, this does not mean that all the faintness and tendency to nausea in each case had subsided; in a few of the cases these still continued. By this time we had thoroughly educated our patients in the *modus operandi* of the cure, and then took their names for conference the remainder of the voyage. With one exception, a case at first the mildest of the ten, but who obstinately kept his berth, and refused to continue the treatment, and remained sick throughout, the cases continued permanent cures. The following are the names, as on the saloon passenger list of the *Etruria*, February 4th: His Excellency J. Gennadius, Hellenic Minister, United States; Mr. Leonard Jerome, New York; Mrs. John A. King, Philadelphia; Mr. Thomas Le Boutillier, New York; F. D. Millet, artist, New York; Dr. A. Lawrence, Memphis; Miss Ida Griffiths, New York; Count E. Zbrowski, Philadelphia; Mrs. J. H. Thomson, New York; John Schmidt, China. During the last part of the trip, five others, whom we had not seen fit to put in our list, were benefited by the experiment, which, to our minds, establishes the theory as a fact beyond any doubt. The cure," conclude these correspondents, "is infallible in all cases that persist in carrying it out." Here, therefore, is a useful hint for readers of Health who may be contemplating a sea voyage, and who desire to secure immunity from the pains and pangs of *mal de mer*.

◆ ◆ ◆

Milk in Switzerland.—According to a recent statement the value of the animal production of milk in Switzerland is no less than £7,300,000; in other words, over 410,000,000 gallons are given annually by 662,336 cows and 277,277 goats (the total number of goats being 414,916). Of this quantity 39·6 per cent. is made into cheese and condensed milk, 42·6 supplied in its normal condition for consumption, and 17·8 used in the farmyard for rearing and fattening purposes. There are 2,900 cheese farms in the Alpine regions, and 2,600 in the valleys. The fertile canton of Berne yields the largest supply of milk, after which come the Cantons of St. Gall, Zurich, and Lucerne.

Original Essays

"Life is not to live, but to be well."—*Martial.*

MORE ABOUT DRUGS AND DRUGGING.

By M.D.

That we scarcely know the exact manner in which drugs affect the intimate tissues or the cells of the body, is, of course, at once an admitted fact and gap in our knowledge. Quinine, administered in the case of ague, for instance, or other malarious diseases, undoubtedly has the power of modifying or preventing the recurrence of the attacks. How it effects this desirable end, we do not know as a matter of precise knowledge. It may be that quinine produces a state of blood unfavourable to the development of the disease-principle; or it may be that the drug, passing into the blood, acts as a germicide and kills the germs or minute organisms which are identified with malarious diseases.

So, also, when we administer mercury or iodide of potash for constitutional disorders, it is perhaps impossible in the existing state of our knowledge to say precisely in what way the drugs act to prevent or to modify the ailments in question. We are, however, guided very exactly by the results of experience. Observation and practice in the use of drugs here convert empirical treatment into a science. The case of drugs thus presented is on all fours with the effect of vaccination in preventing smallpox. It is difficult to say precisely how vaccine lymph acts. That it serves to prevent smallpox in the vast majority of cases, when duly placed within the blood-circulation is evident to all but rabid anti-vaccinationists. It may do so by altering the tissues or cells which are susceptible to smallpox attack in such a fashion that the germs of that disease have no longer any power to infect them. Thus we may believe that the vaccine germs "growing in the body consume, or are instrumental in eliminating or destroying some chemical compound necessary for the existence and multiplication of the (disease) organism." This is Dr. Klein's expression of what is called the "exhaustion" theory of protection against a disease (*e.g.*, smallpox) say by a previous attack of that disease. Another view holds that the germs, say of vaccine lymph or of a disease, multiply in the body and produce some substance which acts as a kind of poison to any succeeding germs of the same nature which may enter the body. This is the "antidote" theory of Klebs.

The analogy between these views and the action of drugs which affect the body as a whole and which tend to counteract constitutional disease is clear enough. We may conceive a drug to possess some such power as germs possess to alter the body's relations to new germs, or to produce some substance which, developed in the tissues, forbids by its presence the inroads of further disease-particles. Indeed, we may go further still, and discern in the operation of medicines which can scarcely be termed "drugs" at all, a likeness to the actions just noted. If we brace up the system of a consumptive patient by giving cod liver oil, we are in reality toning up his tissues by the administration of fat, and are thus imparting fresh strength to combat the inroad of the tubercle-attack by supplying the body at large with new material in the shape of a suitable food.

One important feature in the administration of drugs, as pointed out by Dr. Bruce, is connected with the principle that "successful treatment of disease necessarily

involves a *power of recovery*." This author goes on to note that the power of recovery is manifested in various ways. Thus an organ or part, when called upon, can exercise its "reserve force." Just as a cart-horse, brought to the foot of a steep hill can, by exercise of reserve muscular power, pull its load to the top, so the heart, or any other muscle, may, when occasion demands, make a "spurt" in the direction of overcoming disturbance of its functions. Again, the body may exhibit a principle of *compensation*. One kidney, by becoming greatly enlarged, relieves the strain on the other, and ailing, organ; or, when the lungs are affected, skin and kidneys may combine to aid more largely in the work of the breathing organs. So, also, we note a *power of expelling causes of disorder*, as when the stomach rejects an irritating substance, or when the intestines similarly serve as an exit-channel for foreign matter. While, lastly, there exists a *power of repair*, seen equally in the healing of a scratch on the finger and in the repair of a broken bone.

Now, it may be said that medicine, in the administration of drugs, is largely occupied with favouring one or more of the above natural processes incidental to the restoration of health. The physician favours the operation of these processes, and, in one view, the art of prescribing drugs consists in aiding, as far and as speedily as may be, the body's own efforts at cure. The attack of diarrhœa, which supervenes upon an improper diet, is nature's attempt to get rid of the irritating material, as we have seen; and the administration of opium, or of an astringent, to check the ailment is an illustration of the physician's intent to aid the digestive tract in recovering its tone and in returning to its normal state. More complex, as was shown in our last paper, is the attempt of medicine to counteract and nullify the effect of disease material in the body. Here, if we know how a drug affects the body in health, we use an opposite drug, that is one acting in an opposite fashion to the cause of the disease we mean to treat, and thus expect to cure the ailment through the application of exact knowledge of cause and effect. Add to this, that even when we cannot cure disease in this way, we may ameliorate the patient's condition, and, by relieving pain, prolong life, and we may be said to have summed up the vital points connected with drugs and their mode of action.

Medicine, however, will probably never want its searchers after absolute remedies and perfect means of cure for specific diseases. Take, for example, the case of cancer. The grave nature of this disease, its painful character, and its often fatal effects, render the search after a panacea, therefore, a perfectly just and legitimate object of scientific inquiry. One of the latest remedies to be revived, in this connection, is Chian turpentine, the employment of which is due to the advice and suggestion of Professor Clay. In testing the value of any remedy professing to be a cure for a given disorder, it is evident the experience of physicians must count for much, or, indeed, for everything. The remedy in such a case, if discovered at all, will be made clear as the result of empirical study. Yet, without some idea of the relation between the disease and the remedy, it would be absurd to administer any drug in a haphazard fashion. Mankind will happily never lose hope of being able successfully to combat the gravest of diseases, and even if the truth be reached through many stumbles and gropings in the dark, we may well be content not only to forgive the errors of the seekers, but to admire the persistence and determination wherewith humanity wages war against the troubles that afflict its kind.

Finally, it should be borne in mind that there exist many causes which modify the successful application and use of drugs. The influence of mind over body, for example, exercises a potent power in aiding or preventing the due operation of medicines. A few drops of pure water given to a patient, under the idea that the fluid is a powerful narcotic, will send him off into a deep repose when real sleep-producers have failed to effect that end. The "bread pills" which have cured many nervous disorders of hysterical nature exemplify another case of mental influence modifying the action of drugs. So, also, patients now and then exhibit "idiosyncrasies," that is, special susceptibilities or the reverse to the operation of medicines. The dose of opium which will ordinarily procure sleep in one case, will fail utterly to produce sleep in another. One opiate acts successfully on one man, while it is powerless in the case of his neighbour, who in turn may be readily affected by another narcotic. It is impossible, of course, to predict such personal peculiarities. The personal experience of patient and physician can alone suffice to reveal their existence; yet, that such conditions do materially modify the action of medicines, goes without saying.

Our aim in writing these papers has been that of demonstrating how difficult and complex an art is that which has for its purport the administration of drugs for the relief and cure of disease. The public should be led to understand clearly the nature of the physician's relations to them as a prescriber of medicines. The quack unblushingly pretends that his elixir or decoction is a cure for any and every disorder. We read of pills and potions advertised to cure everything from scrofula and consumption to cancer or epilepsy. If the people at large were educated up to the true knowledge of even the elements of medicine, and were enabled thus to exercise their common sense in the matter of drugs and drugging, quackery would soon become an obsolete institution, and the quack's occupation, like that of the Moor of Venice, would be gone beyond all hope of recovery.

"LIKE BEGETS LIKE."

By Dr. E. J. Dungate.

THIRD PAPER.

PECULIARITIES IN STRUCTURE.

Sometimes a variation in the colour of the hair is noticed in different generations, the hair being alike in alternating generations. Dr. Elam, in his work "Physicians' Problems," has the following: "A friend, very familiar with the Highlands of Scotland, informs me that this succession is almost constant there, and that the *dhu*, or black, is generally succeeded by the *ruach*, or red, and *vice versâ*; while the *bahn*, *bane*, or white, evinces more constancy in colour. It is exceedingly rare to find red or black hair in the *white* or fair-haired tribes; while the darker tribes regularly alternate black and red. Siebold, in the *Journal für Geburtshülfe* (Band I.), mentions a married couple, the fathers of whom were both red-haired, but they had not red hair themselves. They had four sons, who were red-headed, and three daughters, whose hair was of another colour. Examples of *reversion*, such as this, are quite common in the case of some diseases. There is a disease called *plica polonica*, which is hereditary in Poland. Alibert says: "It is observed not unfrequently to attack the father and the grandson, whilst the son is spared. . . . . A character which is

common to it with other maladies, particularly with gout."

A similarity in the colour and nature of the hair is commonly seen in members of the same family. Mr. Catlin, speaking of the Mandans, who are a branch of the same stock as the Dahcotas, mentions a remarkable peculiarity. He says: "I have ascertained, on a careful inquiry, that about one in ten or twelve of the whole tribe are what the French call *cheveux gris*, or 'grey hairs,' and that this strange and unaccountable phenomenon is not the result of disease or habit, but that it is unquestionably an hereditary character which runs in families, and indicates no inequality in disposition or intellect. And, by passing this hair through my hands, as I often have, I have found it uniformly to be as coarse and harsh as a horse's mane; differing materially from the hair of other colours which, amongst the Mandans, is generally as fine and soft as silk."

Peculiarities in the structure and number of the teeth are often correlated with peculiarities in the hair, and these are transmitted together. Moung Phoset, one of King Theebaw's "royal," sacred, hairy family mentioned above, was remarkable not only for the extraordinary development of hair, but also for the absence of molar teeth. Several years ago Dr. Thurnam mentioned a peculiar case in a paper read before the Royal Medical and Chirurgical Society. A grandmother was perfectly bald; her two grandsons were similarly affected (*i.e.*, with *alopecia*), and they had only four teeth each. Another case of hereditary absence of hair was mentioned before the same society in May, 1886. A mother had been almost bald from the age of six. Her son, at the age of three and a half, was not only bald, but his skin was remarkably thin, in some parts not thicker than brown paper. In writing on heredity, Mr. Sedgwick mentions that congenital baldness can result from breeding in-and-in. He has known cases where "top-knotted" canaries had offspring which were bald, and sometimes had deficiencies in the skin.

A great likeness in the shape and setting of the teeth may often be noticed between parents and their children. Total absence of teeth has also been a family characteristic. Mr. Sedgwick was acquainted with a gentleman who never had teeth, and his children inherited the same defect. That author also gives the following: "A gentleman had, with both dentitions, a double tooth in place of the left second incisor in the upper jaw. He was the only one in a family of nine children who presented this peculiarity, which he inherited from his paternal grandfather, whom he so exactly resembled, even in the form of his hands also, as often to have arrested the attention of their acquaintances." Dr. Whitehead, in his work "On Hereditary Diseases," mentions that the possession of well-grown teeth in new-born children is very rare. He knew a mother who had been born with this irregularity. She had two children, and both of them showed at birth the two central incisors of the lower jaw. These teeth were removed, because they caused an ulceration on the under surface of the tongue during sucking.

Peculiarities connected with the eye are often transmitted. Colour-blindness is hereditary. Dalton suffered from it in common with his brother. Cases of hereditary squinting are exceedingly common, and the peculiarity, as in the Montmorency family, may pass through many generations. Sir Henry Holland says, "I have known squinting to occur in every one of five children, whose parents had this defect." In the *Lancet* for December, 1862, Mr. Hulme gives an account of four children, members of the same family, upon whom he operated for inflammation of the lens of the eye. Mr. Streatfield, in the first vol. of the "Ophthalmic Hospital Reports," describes six cases of cataract which occurred in a mother and her five children. He was unable to find that any of her paternal or maternal relatives were affected in the same way. According to Montaigne, there were three individuals in the family of Lepidus, at Rome, who were born with the same eye covered with cartilage. The "Cyclopædia of Practical Medicine" says, "All the members of the family of the Le Comptes saw clearly till about the age of sixteen or eighteen; at that age some of them, without any apparent cause, became dim-sighted, and grew gradually more so till total blindness ensued; such has been the case for three generations, with a certain number in each race; but such as have escaped that critical age have retained their sight through life." Sir Henry Holland, in "Medical Notes and Reflections," gives a similar case. In a family of five children, four became blind when they were twelve years old. The only preceding record of this peculiarity was an old tombstone, the inscription upon which showed that a mother and her children belonging to remote generations were all blind. In the "Highlands of Æthiopia," by Harris, the following occurs (vol i. chap. xxxiii.):—"Sheïkh Oomer Buttoo ibn Ali, akil of the Tukhaïel, who occupy the country from the oasis of Yoor Eraïn Mároo to Háo, a few miles eastward of the Háwash, glories in the loss of the sinister eye, and he is reported to have forfeited it by an hereditary visitation, which through many generations has disfigured his ancestors in like manner—no single head of the illustrious line having been known to possess two eyes." It is well known that the eyes of moles and some other burrowing animals are not only rudimentary, but are sometimes entirely covered by skin and fur. They have apparently gradually grown less by disuse, and then this peculiarity is transmitted. A similar thing has been noticed concerning the fish in some subterranean caves.

There has been much divergence of opinion concerning the influence of heredity in myopia or short sight. Von Arlt says, "Short sight itself cannot be looked upon as hereditary, but only the *tendency* to short-sight." Nicati, of Marseilles, took twenty-four cases in which both father and mother were short-sighted, and in twenty of the cases the short-sight was transmitted to the sons. Out of a hundred and twelve cases, where the father alone was short-sighted, the short-sight was transmitted in fifty per cent. The mother alone was short-sighted in forty-three cases, and in twenty-five of those cases the sons were short-sighted. There is so much divergence of opinion, however, connected with this question, that Dr. Cohn concludes an excellent article on the subject (in "Hygiene of the Eye") by saying, "From all the opinions which experts have communicated to us only thus much follows: that the question of the heredity of myopia is not yet decided; that the transmission of the tendency to myopia is at least highly probable, but that in very many cases, without any hereditary predisposition, myopia is developed by other causes."

Cases are reported which show that hare-lip and cleft palate are sometimes hereditary. Before a meeting of gentlemen of the medical profession at Stafford, Feb. 25th, 1886, Dr. E. T. Tylecote showed a boy six months old who had a double hare-lip and cleft palate. No other deformity could be shown either on the mother's or father's side; but this was the second child with hare-lip. The mother explained the occurrence by saying that she had received a severe shock through seeing a

man disfigured with hare-lip. Dr. Tylecote, however, discovered that her father had three first cousins who were severally deformed in this way. This would tend to show that the case was an hereditary one. "A well-formed man," says Ribot, "had two relatives affected with hare-lip; by his first wife he had eleven children, two of them hare-lipped, and by his second wife two, who possessed the same deformity."

Vegetable Glue.—Concentrated solution of gum arabic possesses the disagreeable property, when applied to printing and other paper not strongly sized, to penetrate them to transparency, and, in spite of this, not making them adhere to other paper. Paper cannot be attached to common pasteboard, nor wood to wood by it. Paper gummed with mucilage will not adhere to metallic surfaces, but soon falls off; and it is no use for glass, porcelain, or earthenware. All these disadvantages are remedied when an aqueous solution of sulphate of aluminum is added. For 250 grains of the concentrated gum solution (prepared with two parts of gum and five of water), two grains of cryst. aluminum sulphate will suffice. This salt is dissolved in ten times its quantity of water, and mixed directly with the mucilage, which in this condition may be termed *vegetable glue*. Solution of alum serves the same purpose, but far less efficiently.

The Oath of Hippocrates.—The following is given by a medical correspondent as the oath presented by the Father of Medicine for the votaries of his art: "I swear by Apollo the Physician, by Æsculapius, by Hygeia, and Panaceia, and all the gods and goddesses, calling them to witness that I will fulfil religiously, according to the best of my power and judgment, the solemn promise and the written bond which I now do make. I will honour, in the same degree as my parents, the master who has taught me this art, and endeavour to administer to all his necessities. I will consider his children as my own brothers, and will teach them my profession, should they express a wish to follow it, without remuneration or written bond. I will admit to my lessons, to my discourses, and to all my other methods of teaching, my own sons, and those of my tutor, and those who have been inscribed as pupils and have taken the medical oath, but no one else. I will prescribe such a course of regimen as may be best suited to the condition of my patients, according to the best of my power and judgment, seeking to preserve them from anything that might prove injurious. No inducement shall ever lead me to administer poison, nor will I ever be the author of such advice; neither will I contribute to an abortion. I will retain religiously the purity and integrity both of my conduct and of my art. I will not cut anyone for the stone, but will leave the operation to those who cultivate it. Into whatever dwellings I go, I will enter them with the sole view of succouring the sick, abstaining from all injurious views and corruption, especially from any immodest action towards women or men, freemen or slaves. If, during my attendance, or even unprofessionally in common life, I happen to see or hear of any circumstances which should not be revealed, I will consider them as a profound secret, and observe on the subject a religious silence. May I, if I religiously observe this oath, and do not break it, enjoy good success in life, and in the practice of my art, and obtain general esteem for ever; should I transgress and become a perjurer, may the reverse be my lot."

Personal Health

"Be timely wise;
With health all taste of pleasure flies."—*Gay.*

THE BODY WEIGHT.

By a Physician.

The relation of the body-weight to the height is an important one to the individual. A very fat man is seldom a great man intellectually, and rarely lives to old age; he easily succumbs to disease. The very thin man is keen and quick, and generally fretted by work requiring great detail. He is wiry, and lasts long. But the very long-lived are hardly found at the extremes.

According to Dr. Robertson, calculating according to the Greek model, which differs little from the English standard, a man 5 ft. 3 in. tall should weigh 8 stone 11 lbs.; a man 5 ft. 6 in., 10 st. 4 lbs.; a man 5 ft. 8 in., 11 st. 3 lbs.; a man 6 ft., 13 st. 5 lbs.; a girl of 16 or 18 years of age, 5 ft. 1 or 2 inches tall, should weigh about 8 stones.

Among the more favoured classes the average height is greater, as is also the weight, than among the less favoured portion of the community. In other words, imperfect hygienic surroundings, poor food and clothing, worry and overwork, exert a dwarfing influence upon the stature and weight of a people. But it is in infancy that this impeded growth is most noticeable from month to month, according as the food is unsuited to the child. The following tables should be of interest to everyone, and especially to those who have the care of the young. Nothing could be more striking. They are from "Gerhardt's Handbook of Diseases of Children." A gramme, it should be added, is about 15½ grains English; a centimètre is 0·39370 of an English inch. The English inch equals 2·539 centimetres.

Class I.—Children of Average Height and Upward.

Nourishment.	Weight in grammes.				
	15 days.	3 mos.	6 mos.	9 mos.	12 mos.
Breast Milk	3,594	5,701	7,027	8,401	9,930
Breast Milk, with some Cow's Milk and Starchy Food	3,525	5,310	6,317	7,916	8,480

Class II.—Children Under the Average Weight.

Breast Milk	3,127	4,225	5,775	6,490	7,910
Breast Milk, with Cow's Milk and Starchy Food	2,928	4,143	5,593	5,932	6,823
Cow's Milk and Starchy Food exclusively	2,900	4,089	4,744	5,254	6,128

Class I.—Length in Centimètres of Children of Average Size and Upwards.

	15 days.	6 months.	12 months.
Breast Milk	51	67	73
Breast Milk, with some Cow's Milk and Starchy Food	49	64	69

Class II.—Length in Centimètres of Children Under Average Size.

Breast Milk	49	59	69
Breast Milk, with Cow's Milk and Starchy Food	43	55	63
Cow's Milk and Starchy Food exclusively			

Other tables could be given, but these will suffice to show the importance of the subject. At the age of four years, a child that has been fed on breast milk during the first year of life will weigh nearly five pounds more than

one of same age who was fed on artificial food, and will be an inch taller. What can be more striking than this?

Nothing can equal for an infant the human mother's milk, and few foods are more disastrous than starchy ones. The infant mortality from starchy foods is very great.

We are all familiar with the story of the philosopher who lived in scales. I never see a physician fumbling over a chronic patient's wrist and looking at the colour of the eye and the appearance of the tongue, but I feel constrained to exclaim, "Sir, why don't you weigh him." The weight of the patient, taken regularly for weeks, often speaks with more emphasis than can tongue, and eye, and pulse combined. Weigh the baby too, and that regularly. When the little one *begins* to lose weight is the time to set things in order, and not when it has wasted greatly. This is the old story about an ounce of prevention. Indeed it may be said to all in poor health—watch your weight.

In condemning starchy foods for babies, it should be noted that there is a contra-distinction between them and a soluble malt food, like Kepler's Malt Extract, which agrees with children, and can be added with advantage to cow's milk in all cases of the artificial feeding of infants, and taken with benefit by those who always have a "lean and hungry look."

VENTRILOQUISM.

At a recent meeting of the Physiological Society, Berlin, Herr Meyer, from Hamburg, discussed the nature of ventriloquism, and combated the opinion, so widely spread among physiologists, that it consists in speaking while inspiring, and without the cavity of the mouth acting in any way as a resonator; on the contrary, ventriloquists speak while expiring, and do move their mouths. An extended series of laryngoscopic observations on the speaker, who has practised ventriloquism for many years, has shown that in ventriloquizing the vocal opening of the larynx is shortened as it is when producing the falsetto, and that the soft palate is pressed back, and that the uvula becomes invisible. Everybody who naturally possesses a high voice can easily learn to ventriloquize.

One most important factor in the deception of the listeners is the contrast between the loud, full, and metallic tone in which the question is asked and the answer which immediately follows in a high and gentle falsetto. Sibilants and the high *I* should be as far as possible avoided. The speaker then gave a series of extremely successful examples of ventriloquism, which did not presuppose any particular training, and showed that it is never accompanied by any special action of the abdominal muscles. Prof. Gad has made some experiments on Herr Meyer, and by graphically recording the variations in pressure of the air, has shown that the curve obtained when a certain sentence is spoken in the ordinary way is in all respects identical with the one which is described when the same sentence is spoken ventriloquially. In the latter case the volume of air expired was considerably less than during normal speech; in one particular case it amounted to only 900 c. c., whereas during normal speech the volume expired was 1,300 c. c.

Dr. Benda expressed his idea that when ventriloquizing, the Eustachian tubes are open, and the cavity of the tympanum, together with the tympanic membrane, are set into simultaneous vibration. He had not been able to detect any resonance of the tympanic membrane in Herr Meyer; but he believes that this explanation of the curiously veiled tones emitted is not thereby invalidated, since they closely resemble the tones produced by speaking while yawning, in which case the Eustachian tubes (leading from mouth to ear) are certainly open, and the tympanic cavity acts as a resonator.

The Death-Point by Heat of Disease Germs.—According to Sternberg, the following table represents the thermal death-point of various microbes :—

Organism.	Thermal Death-point. Deg. Fahr.
Typhoid-bacillus	132·8
Cholera-spirillum (comma-bacillus of Koch)	125·6
Cholera-spirillum of Finkler and Prior	125·6
Cholera-bacillus of Emmerich	143·6
Anthrax-bacillus (without spores, Chauveau)	129·2
Tubercle-bacillus in fresh sputum (Schill and Fischer)	212
Bacillus of glanders (Löffler)	131
Bacillus of mouse septicæmia Bacillus of Rouget Bacillus of Schwein-Rothlauf	140
(These three organisms appear to be identical. They are said to form spores.)	
Brieger's bacillus (from fæces)	143·6
Bacillus of green pus	132·8
Friedlander's bacillus (so-called Pneumococcus)	136·4
Bacillus of foul-brood	212
Staphylococcus pyogenes aureus	136·4
Staphylococcus pyogenes citreus	143·6
Staphylococcus pyogenes albus	143·6
Micrococcus of osteomyelitis	136·4
(Probably identical with Staph. aureus)	
Streptococcus of erysipelas	129·2
Micrococcus tetragenus	140
Micrococcus Pasteurii (Sternberg)	140

Therapeutical Value of Buttermilk. — Though buttermilk is not a drug, it is a substance of considerable therapeutical value. An eminent physician once said that if every one knew the value of buttermilk as a drink, it would be more freely partaken of by persons who drink so excessively of other beverages, and further compared its effects upon the system to the cleaning out of a cook's stove that has been clogged up with débris—the gathered refuse matter can in no way be exterminated from the system so effectually as by drinking buttermilk. It is a remedy for indigestion, soothes, and is a useful hypnotic. Its medicinal qualities cannot be overrated. It makes gastric juice, and contains properties that readily assimilate with it with very little wear upon the digestive organs. Every one who values good health should drink buttermilk every day in warm weather. It may be stated for the benefit of those who are not aware of it, that in the churning the first process of digestion is gone through, making it one of the easiest and quickest of all things to digest.

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When Faith grew doting, and our reason cold,
'Twas she discovered that the world was young,
And taught a language to its lisping tongue."
—*Charles Mackay.*

ON THE POWER OF MUSIC AND ITS PLACE IN MEDICINE.

By Guy C. Rothery.

THIRD PAPER.

The "mission of music" has been long and very warmly squabbled over. On the one hand we have a learned physician who tells us: "Music has as little to do with morals as it has to do with intellectuality. It is too vague and indefinite to create a mental picture, far less to tell a story, moral or otherwise, in the absence of a verbal theme, of which it is capable of being made the beautiful accompaniment." And on the other side, it is just as stoutly advocated that, "the musical style and character of a people is the thermometer of the physical susceptibilities and moral sentiments of a nation," a statement which, if rather rhetorical in construction, seems to be rational enough, and founded on truth. For, as a matter of fact, music varies (or did so, before cosmopolitanism and other kindred abominations supervened to drag us down to one ugly dead level of insipidity) as much as national character does. Climate, manners and customs, the degree of civilization, all seem to find fitting expression in truly national music. In this matter we must view popular music quite apart from the polished productions of the classic masters and their schools. We find the Italians passionately addicted to love ditties; the French fond of quick and brief movements, full of gaiety, and empty of all true feeling; the Germans are slow, lengthy, and calm in musical reveries, with a strong leaning towards mysticism; we English swear by ballads full of tears or warlike sounds, have no objection to an occasional ghost, love the "green countree," and fantastic ditties; the Southern Russian peasant takes his music sadly, moaning out interminable complaints; the stoutly-built Corsican makes night hideous by wild strains of vengeance and heartrending *voceri* reeking with blood. It is somewhat difficult to delve down to the real and unadulterated national popular music; but when we can get hold of it, we are able to trace in it a characteristic likeness of the singers.

Now, of course, if we once admit the truth of this, then we are equally obliged to allow that music is capable of conveying a special and definite meaning or mental picture; in other words, of telling a story.

Travellers in untrodden paths and the lands of uncontaminated savages, all tell us that those they have met with have bowed down and acknowledged the reign of music. In the far East a musical science, dating back many centuries, still survives, and is able to work miracles. The, as yet, imperfectly known land of China holds many a surprise in store for the student of music. A poetical legend recounts how "Tcho-yung (one of their mythical emperors) is said to have listened to the songs of the birds while the empire was in a state of profound peace, and their singing caused him to invent a music which penetrated everywhere, speaking to the intelligence, calming the passions of the heart, causing perfect equilibrium in the emotions, facilitating and improving the use of all the senses and prolonging the life of man." Alas! to all appearance, this beautiful music has been lost to the children of the Flowery Land for ever and aye. But a Court physician averred that their music had great charms and the most powerful effects on them: "The melodies of our music pass through the ear to the heart, and from the heart to the soul," said the sage.

The Hindoos have a strange, but really scientific and powerful musical theory, capable of great things. Moreover, they had, long before Europe awoke to civilization, treated music philosophically and scientifically; seeking out its mechanical production and mysterious influence. We have also discovered other ancient systems of music, now extinct. But the savage, in his vast continental forests and plains, in his valleys and mountain-chains, or in his ocean-bounded island, possesses a music of his own. It is rude, and probably would not be readily recognized by our highly educated professors and exacting *cognoscenti*. Still, with them their music, vocal and instrumental, is a real power, means much, and, in the hands of the skilled, may accomplish wonders. The tribe steeped in lowest barbarism will express their pleasure, anger, alarm, and fear musically, if not melodiously. The priests hold their disciples captive with it; the medicine-man charms the evil spirits, and frightens the strong ones away with drum and fife. Veracious travellers have recorded astounding cures effected by these rough and ready *medicos* with the aid of their appalling music. And here it is well to observe that, according to some authorities, the curative powers of music depend rather upon the strength and volume than the quality. It is not a pleasant confession to make, but we are obliged to do so, for Dr. Burette, of Paris, held that sciatica could be relieved and cured, as well as several nervous complaints, by music, quite independently of the greater or lesser skill of the musician. For in these cases the music merely acts as a stimulant, giving rise to nervous and muscular irritation, causing physiological actions. According to this, we should not expect the savage musical medicine-man to soothe the wearied breast, relieve the over-worked brain, or calm frantic madness, while he could quite well cure less complicated maladies.

Much of our refined music is scarcely appreciated by some savages; though, on the other hand, many native tribes are visibly affected by it. As a rule, the "pictorial" musician, the *improvisator*, is appreciated and cherished. We, in Europe, know well the power of association as attached to music. The martial airs, religious tunes, and national songs call forth enthusiasm by means of these associated ideas. The *Ranz des Vaches* has a marvellous hold on the Switzers; it was a penal offence, without benefice of clergy, to play this lamentable tune in the army of the old French Bourbons. The beautifully simple "Home, Sweet Home," will bring tears to the eyes of the bronzed exiles and bearded pioneers in far distant lands. Scotsmen will go into raptures over the squeaking blasts of that fiendish abomination, the Highland bagpipes! Clement Marot's Huguenot Psalms, set to lively tunes, did wonders for the Reformers. "If music," says M. de Falloux, "merely impelled man to reverie, I should still think it ought to be counted among the highest of his servants." Dreaming has never accomplished anything, nor can it terminate anything, though it is the "beginning of a great deal." But "music takes energetic part in the struggles of humanity, and it is then that the spiritual influence of music makes itself felt. We have only to refer to national music, military music, and religious music." It is, indeed, difficult to believe that, for instance, the early and simple tunes of

the Mother Church would not appeal to our reverential feelings apart from all association of ideas.

The Reverend Father Kircher, however, who wrote a big book on music, seemed to hold that nearly everything depended upon ideal and material associations and surroundings. In his model plan for musical government, he assigned particular places for each style of music. Moreover, he thought that executants should pay special attention to the seasons when planning their concerts. May, June, July, August, September, and October he held to be particularly favourable to music; November, January, February, March, and April he esteemed baneful. "Cold, dry winds," says the enthusiastic abbé, "help the vocalists; whilst fogs, wet, and even humid winds will play them sad tricks." He attributed special virtues to each instrument, and here Dr. Chomet agrees with him. This musical pathologist suggests that each instrument has a specific value, as well in a medicinal as a musical sense; that they are specially adapted to different styles—sad, gay, and so on—and to various ailments. An accurate classification of these occult values and their symbolism would, he said, prove of incalculable service to medical men and composers.

This path to medical glory is still open to some painstaking enthusiast. We tender the following advice to such a one: refer to, and carefully read through, two highly interesting and amusing papers, by Addison, on "Character in Conversation Described as Instruments of Music." These papers may very possibly hide some useful hints for the future *medico*-musical pathologist.

ISINGLASS.

Isinglass consists of the dried swimming bladder of different fishes. The bladders vary much in shape, according to their origin, and they are prepared for the market in various ways. Some are simply dried while slightly distended, forming pipe isinglass. When there are natural openings in these tubes, they are called purses. When the swimming bladders are slit open, flattened, and dried, they are known as leaf isinglass. Other things being equal, the value of a sample is determined by the amount of impurities present. These impurities are ordinary dirt, mucus naturally present inside the bladder, technically called grease, and blood stains. If the bladders were hung up to dry with the orifice downward, the mucus could be drained off; but usually the fishermen fear the reduction in weight, and take care to retain all they can. It is necessary to insist on having the bladders slit up and rinsed clean as soon as they are removed from the fish. This would so much increase the value of the product that the extra labour would be very profitable. Blood stains cannot be removed without injuring the quality. If any process could be devised effectual for this purpose, a valuable discovery would be made.

The chief places of production are Russia, Siberia, and Hudson's Bay; Brazil, West Indies, Penang, Bombay, Manilla, this being approximately the order of their importance. All Russian and Siberian is known as Russian, the more frequent varieties being "Beluga leaf," the finest in the market, obtained from a species of sturgeon; Astrakhan leaf; Saliansky leaf and book; and Samovy leaf and book. The fish yielding them inhabit the great rivers and fresh-water lakes. They are caught during the winter, and the bladders removed and dried in various forms. The winter catch is collected at the great fair at Nijni-Novgorod, and is there bought by brokers and merchants from St. Petersburg. Some trade is done in Hamburg, but the varieties there sold are not what we know as Russian. When the ice breaks up, the isinglass is shipped by steamer as quickly as possible, mostly to the London docks, on account of the isinglass merchants there. The end of June and the beginning of July is the season when the winter's produce reaches this country. The Brazil, Penang, Bombay, and Manilla products are imported at all periods of the year, generally packed in cases, varying in weight. Original cases of Penang isinglass weigh 3 cwt.; Manilla, about 2 cwt.; Brazilian, about 2 cwt. 3 qrs.

The uses of isinglass are not very varied. The largest quantity is used by brewers and wine merchants for clarifying their goods. This property is extraordinary; for gelatin, which seems chemically the same thing as isinglass, does not possess it. One theory is that the tenacious mucilage shaken with the liquid gradually settles to the bottom, entangling all floating particles as it sinks. Another suggestion is that a very delicate fibrous network remains after the isinglass is dissolved, and entangles the particles in the way the mucilage is supposed to act. Many varieties of isinglass, generally the lower brands, are used for this purpose. Some brewers use it in the natural state, others prefer it manufactured into a fine or wide strip, which dissolves quicker, and suffers no waste. At present, Penang is the favourite kind. Russian long staple isinglass is used only by the Worcestershire farmers for clarifying their cider. In spite of its costliness, Scotch brewers prefer Russian leaf. The use of Samovy isinglass was formerly universal among the Irish brewers, and much is still sent to Dublin; but other varieties have partly taken its place. It is a Russian kind, obtained from the bladders of the *som* fish. Its name is the adjective form of the noun *som*. It is used only by brewers. Russian isinglass is also shipped to Maderia for use in clarifying wines. A good deal of various kinds is used in this country by wine merchants.

For clarifying purposes the isinglass is "cut" or dissolved in acid, sulphurous acid being used by brewers, as it tends to preserve the beer. When reduced to the right consistence, a little is placed in each cask before sending it out for consumption. Sole skins are the only substitute used for isinglass. They can only be had in winter, the supply is uncertain, and they have not the strength of the Penang varieties. Next to the brewer's demand comes that of the cook, who uses it for making jellies, thickening soup, and stiffening jams. For this purpose best Russian takes the highest position, owing to the superior strength and nourishing properties. Isinglass being the purest natural form of gelatin, a very pure article, artificially prepared without the use of acids or other chemicals, has long been known in the market as patent isinglass. It does not possess the clarifying power of the natural article, but is equally useful for cooking.

There seem to be only six isinglass cutters in England, all being domiciled in London. The sorted isinglass is very hard and tough, very difficult to bend or manipulate. It is soaked till it becomes a little pliable, and is then trimmed. Sometimes it is just pressed by hand on a board with a rounded surface, at others it is run once between strong rollers to flatten it a little, and make the dark and dirty spots accessible to the knife, the top of the roller being used to bend the pieces on. The cuttings are sold separately as an inferior grade. The next process is that of rolling. Very hard steel rollers, powerful and accurately adjusted, are used. They are capable of exerting a pressure of 100 tons.

Two are employed, the first to bring the isinglass to a uniform thickness, and the smaller ones, kept cool by a current of water running through them, to reduce it to little more than the thickness of writing-paper. It is very curious to see the thick, tough pieces gradually spreading out under the rollers, and folded and rolled like puff pastry, till the separate pieces so unite that no joint can be seen, and the mass is reduced, under the coarse rollers, to what looks like semi-transparent mill-board. From the finer rollers it comes in a beautfully transparent ribbon, many yards to the pound, "shot" like watered silk, in parallel lines about an inch broad. It is now hung up to dry in a separate room, the drying being an operation of considerable nicety. When sufficiently dried, it is stored till wanted for cutting, or it is sold as ribbon isinglass to all who prefer this form.

The machines for cutting are well and accurately made, and are so adjusted that they slice pieces off a sheet of paper without stirring or bending it in the least. For the "fine cut" isinglass in which chemists are interested, these machines are run at great speed, 2,000 to 2,500 revolutions, making 10,000 to 12,000 cuts in a minute. It takes an hour to cut 5 lb. or 6 lb., so that each pound would contain 100,000 to 125,000 separate fibres if none of them were broken. The actual number must be very much greater—*Watson Smith, Jour. Soc. Chem. Industry.*

Resorcin in Eczema.—Dr. H. P. Chase claims to have treated nine cases of eczema with resorcin with only one failure, and this one had failed to carry out instructions. One case had passed the hands of specialists without relief. The drug was used as follows: R. Resorcin, two drachms; glycerine, q. s.; ad. eight ounces. Mix. Apply with camel's hair pencil morning and evening.

Rings as evidence of age in Trees.—An agent of the U.S. Forestry Department, Mr. R. W. Furras, who has given much study to rings in timber as indicating the age of trees, has reached the following interesting conclusion: "Concentric or annual rings, which were once accepted as good legal evidence, fail, except where climate, soil, temperature, humidity, and all other surroundings are regular and well balanced. Otherwise they are mere guess-work. The only region, within my knowledge, where either rings or measurements were reliable indications are in the secluded, even, and regularly tempered valleys of the Southern Pacific coast. Annual measurements of white elm, catalpa, soft maple, sycamore, pig-hickory, cotton-wood, chestnut, box elder, honey locust, coffee tree, burr and white oak, black walnut, osage, orange, white pine, red cedar, mulberry, and yellow willow (nineteen species), made in south-eastern Nebraska, show that an 'annual growth is very irregular, sometimes scarcely perceptible, and again quite large,' and this he attributes to the difference in seasons. As trees increase in age inner rings decrease in size, sometimes almost disappearing. Diminished rate in growth after a certain age is a rule. Of four great beeches mentioned in London, there were three, each about 17 feet in girth, whose ages were respectively 60, 102, and 200. Mr. Furras found twelve rings in a black locust six years old, twenty-one rings in a shell-bark hickory of twelve years, ten rings in a pig-hickory of six years, eleven rings in a wild crab-apple of five years, and only twenty rings in a chestnut oak of twenty-four years. An American chestnut of only four years had nine rings, while a peach of eight years had only five rings."

Public Health

"Health is the first Wealth."—*Emerson.*

THE MEAT FOOD-SUPPLY OF THE NATION AND ITS FUTURE.

By Azel Ames, Jr., M.D.

THIRD AND CONCLUDING PAPER.

In the great territory of Montana, only 3 per cent. of its area is arable land, and less than 3 per cent. more can be made so only by those large combinations of capital which can bring it under irrigation and cultivation. Against this, as against the producer of cheap beef upon the wild public domain, the Government has set its face; the industry languishes, and the people, in the end, pay the price. It is time that, in the interest of truth and the general good, in behalf of the great cities and our fast-doubling population, the real facts should be known and understood; that, with the wiser regulation of our Indian affairs, the vast areas now assigned to the nomadic savage, without benefit to him and in detriment to the whole people—six thousand acres to every warrior, squaw, and pappoose in Montana—should be made available, under proper restrictions, for the production of cheap food for all. To this subject, as worthy the honest investigation of every sanitarian, I invoke your attention, confident of the result and its influence upon your future action.

It was reserved for the forty-ninth Congress of the United States to enact the first law ever passed in the history of our Government to depress and ruin one great food-producing industry for the benefit of another. While every sanitarian endorses as wise and right every law which properly secures the wholesome character of any article of food or prevents fraud in its manufacture and sale, he must equally deplore any enactment whose force and purpose is to prohibit the manufacture and sale of an article which both science and practical use have unmistakably proved to be a cheap, sound, and wholesome addition to the food-supply.

Oleomargarine, butterine, and other simulants of butter and cheese, as regulated by law in their creation and exposure for sale, are no longer subject to the suspicion and condemnation of the well-informed man. They have passed under the ægis of governmental protection as wholesome and proper articles for the people's use. The ablest chemists have endorsed them; the commissioner of internal revenue, after a year's experience with them under an all-powerful law, declares that there is no complaint as to their quality; and the poor man, who cannot buy the best butter at its ruling price, would gladly and thankfully buy and use them, if he could.

But, with a pur-blindness that history will note with a shudder of surprise, some have actually totally prohibited its being made or vended in their borders; others have stopped only just short of this; while congress, by imposing a special tax upon the retailer of 48 dols. per year, and of 480 dols. upon the wholesaler, has compelled thousands of dealers to remove it from their stock, and have driven the poor man to the use of poisonous "glucose" syrups, cheap "fruit-butters," self-denial, or the purchase of high-priced butter which he cannot afford.

Either such men, in whom we place confidence, such as Profs. Chandler, Atwater, Sharples, Babcock, and a

host of others, are all strangely and simultaneously deceived—the fact that not a single case, well-attested, can be adduced of its having wrought harm, must go for nought—or, as sanitarians, men of common-sense, and earnest well-wishers of our fellow-men, it is time for us to stand upon the truth, and for the common weal urge the revocation of those features of the laws, which, taxing a helpful addition to our food-table, higher even than tobacco, put it out of reach of those to whom it is a blessing and a boon.

Even the hoped-for benefit to the dairyman, in whose interest these laws were enacted, has failed to result, and only the makers of sour, cheesy, and rancid butter, and the speculator who chemically "treats" them and defrauds the community, profit thereby. From the evidences given, it is plain that, extend the grazing area to the utmost, by the large use of the public domain, and the addition of the unused excess of the Indian reservations, supplement it by the enlarged use of fodder-corn and the finishing processes of the corn-shed; by breeding and feeding put upon every four hoofs the largest possible amount of "marbled beef;" stimulate the hog producer by all devisable means; secure the better utilization and economy of our dressed products, and still the steady, onward sweep of the tide of population, will constantly outrun our supply, and these agencies will but serve to check, retard and lessen for a time, the great and inevitable proportionate decadence in our meat supply. But it is much to bring into full play all these forces, and to secure for all even the longer enjoyment of the abundance we now possess. No nobler work commands our efforts, and to you, I know, it commends itself.

Against disease and its baleful effects I need not urge your earnest and continued welfare, for the history of the association is ample proof of your zeal and endeavour. I venture the hope, however, that the expression of this body, which has heretofore been known and felt in the halls of congress, will again be given in aid of that legislation for the suppression of pleuro-pneumonia upon which all contending forces are now a unit, and which will, it is confidently believed, not only rapidly complete the work of eradication already well-begun, but leave "on deck" an authorized agency, clothed with power, ready and able to cope with any outbreak of the future.

I am not ready to believe that this association, which stands as a mentor and leader upon all subjects that affect the sanitary well-being of the public, will keep silence upon laws that deprive the poor man of a valuable article of food, in the interest of another product, and I am the more ready to voice this belief from the fact that my own pecuniary interests lie more with the dairy than the beef industry; and, finally,

I beg to express my earnest hope that we shall do ourselves the justice, as on a former occasion, in the interest of vital statistics, to press upon Congress by resolution, the wisdom and necessity of making adequate provision in the laws providing for the taking of the United States' decennial census of 1890, for a full and complete enumeration and classification of our food animals, and tabulation of their products which enter into our food-supply.

WHEN the boys with the green apples wrestle,
With many a grin and grimace,
The man of the mortar and pestle
Goes round with a smile on his face:
And the doctor his dressing gown puts on—
The sequel he knoweth full well,
And lies on the lounge with his boots on,
And waits for the sound of his bell.

—*New York Weekly.*

Jottings from the Journals

"Th' ingredients of health and long life are
Great temperance, open air,
Easy labour, little care."—*Sir Philip Sydney.*

Life in One-roomed Houses.—Buckle went too far in his desire to make the moral and spiritual nature of man entirely the product of external and material agencies; so that, soul and body, he must change with the flora and fauna of his district. But it is certainly true that the physical surroundings even of the individual man will leave their mark on his soul as well as on his body; and the one result may be, as regards his individual responsibility, as inevitable as the other. Place 126,000 human beings in one-room houses, and 43,000 in houses of five rooms and upwards, and, no mattter who or what they are, you have at once determined for them much both of their moral and physical future. If their course is downwards, the one class has further to fall than the other before both reach the same depth. If their course is to be upwards, the one class has not so far to rise as the other before both reach the same height. All through life man divides his time between work and sleep and play—play including all ways of spending those hours which are not absorbed in work and sleep. The education of the child and the toil of the adult are *regulated for him*, and imposed upon him. The *play* of both is in its character *a matter of choice*, and nothing shows more clearly the inner nature than the nature of the play. But the nature of the play is very much a matter of education and of opportunity; and the opportunity of the child is the education of the adult. If the child has only the dark lobby and the stair to play in, then the man and woman will find amusement only in the dram shop, the music hall, and the dancing saloon. The gutter child grows up into the loafer. The hard-working man when he gets a holiday does not know how to spend it. Even when he finds himself in the country, he has no eye for the scenery, or for the beauties of the grass and the flowers. He carries a bottle of whisky in his pocket, and he makes himself an object of alarm and disgust. The hard-working woman either joins in the debauch, or thinks no shame to be seen in the company of intoxicated men. There is no way of forming a just opinion as to these habits of the inhabitants of our small houses, but by calmly and conscientiously analysing what I might call the physics of our own morality. If Buckle has successfully proved regarding mankind in the mass, inhabiting different regions of the earth, that there is an "influence exercised by the external world in pre-disposing men to certain habits of thought, and thus giving a particular tone to religion, arts, literature, and, in a word, to all the principal manifestations of the human mind, and I believe he has, then is it possible that the one and two-roomed house piled up in tenements, and these tenements again ranked in streets and packed into back courts, can produce the same manner of men as the large houses with all the luxurious space and opportunity of the softening ministration of nature *without*, and the tender wooing of light and warmth and comfortable domesticity *within*? I confess for myself that the physical circumstances of the poor in Glasgow are so contrary in their nature to those which have surrounded me throughout my life, and I recognize such a close relationship between my physical circumstances and the general character of my life, that I can come only to one

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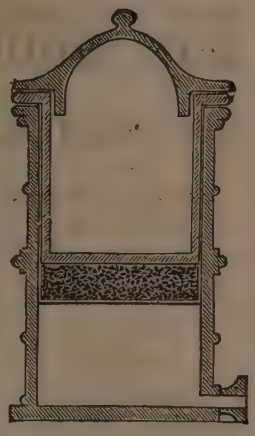

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THE TRUE POMMADE DIVINE.

The great usefulness of this excellent Remedy, the Pommade Divine, is so well known to all who have ever applied it, that no Encomium is necessary, and to those who are yet unacquainted with its virtues, a trial in the following cases will be its best recommendation:—

It is good for all sorts of Pains, Swellings, and Bruises occasioned by Falls, or otherwise, and will prevent the many bad consequences of such Accidents.
For a Cancer before it is broke, and for all sorts of Sore Breasts, particularly in a Lying-In.
For Stiff Necks and for Swellings occasioned by the Evil.
For a Gangrene, melting a little in a wound, without using a tent.
For Pains in the Stomach, rubbed in before the fire.
If a little be well rubbed in for a few minutes on a Bruise or Pinch, it will prevent Blackness. Will also cure Scalds and Burns, applied directly; and Rheumatic and Gouty Pains fixed in any part.

N.B.—No woollen of any kind should be applied to the parts affected, nor any metal (except silver) touch the Pommade. It will retain its virtues many years, and is therefore very useful to all Travellers, particularly Gentlemen of the Army and Navy.

HÆMORRHOIDS (or PILES).

As highly useful family medicines for that most distressing of complaints, Hæmorrhoids (or Piles), Bayley's Remedies have long enjoyed a high reputation. These remedies consist of specially prepared Pyrmont Tablets for invalid use, and of a Pyrmont Liniment for outward application. The tablets are compounded on the principle of the famous Pyrmont waters, which have been so highly recommended in cases of liver complaints, to the presence of which piles are often due, as well as in cases of the latter ailment itself. The liniment is made on allied principles. From an examination of these tablets and of the liniment, we are able to assert that they contain nothing calculated to produce untoward effects in the most delicate constitution, while they are likely to prove most beneficial in mild and severe cases alike. The ease with which the remedy may be taken—the tablets being agreeable to taste, and being merely allowed to dissolve in the mouth—will recommend this preparation in the eyes of those especially who have run the gamut of the many drugs employed for the cure of hæmorrhoids. We recommend a trial of Messrs. Bayley's Tablets, &c., which are to be obtained at 17, Cockspur-street, London, W.—*Vide* Health, *April 8th*, 1887.

Prepared by BAYLEY & COMP.Y, Perfumers,

THE OLD CIVET CAT, 17, COCKSPUR-STREET, LONDON.

PRICE LISTS FREE ON APPLICATION.

or other of two conclusions: Either the poor belong to a different species of the genus man, or the same relationship must exist between *their* different physical circumstances and the different general character of *their* lives. —*Dr. J. B. Russell.*

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Furrows on the Finger Nails.—Nearly twenty years ago Dr. Wilks directed attention to the fact that a transverse furrow appeared on the nails of the hand after a serious illness. Medical literature has since then contained a few references to the subject: he again brought the subject before the Pathological Society at its meeting on March 20th, and related a remarkable case (see p. 664). In that case the furrow was produced in a gentleman in robust health by three days' sea-sickness. Mr. W. W. Wagstaff, whose enforced withdrawal from active work is a matter of so much regret, addressed a note to Dr. Wilks containing the following interesting observations: He pointed out that the furrow was at first, when near the lunula, shallow, and difficult to identify, but that when it reached the middle of the nail, it was distinct, and often, especially in nails with longitudinal ridges, dotted. The furrow reached the middle of the nail about three months after an illness, but moved onwards towards the free end at different rates in various cases, the rate increasing as the free edge was approached. As a rule, all the finger nails were affected, but in some only the right hand showed the mark, and in others only special fingers, the ring-finger most often escaping entirely. Mr. Wagstaff also stated that the furrows could be produced by a local cause, and mentioned a case in which the left hand was injured by a rocket-stick, which fractured the metacarpal bone of the index-finger, and the arm and hand remained in splints for a month; the left hand only showed the transverse furrows, but on all the fingers.—*British Medical Journal.*

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Nurseries and Bedrooms. — The sleeping rooms for children should never be very far from the day apartments, so as to save the fatigue of going up many stairs just before bedtime when the stock of energy is getting low. The day-room should never be in the basement, because of the moisture and impurity of the atmosphere due to the upward ventilation of the soil on which the house is built. Properly built houses should prevent this evil. There should be no sink or cistern on the same floor as the nurseries, for the former may contaminate the atmosphere, and the latter may become contaminated. Any water-closet should project beyond the walls of the house and the nurseries be guarded from its influences by cross ventilation. The crib should have high sides to prevent the child's falling out and injuring itself, and it should be provided with springs, and a soft hair mattress, protected by a gutta-percha cloth, placed under a double sheet. The bed-clothes should be light in weight, but varying in warmth according to the weather. The details of nursery fittings must vary extremely in different grades of society, but the principles are the same in all stations of life, and can be carried out even by the poorest.

St. Mary's Hospital, London.—Dr. Scanes Spicer has been appointed Physician to the department for Diseases of the Throat.

Damp Hands.—A good remedy is Eau de Cologne, four ounces: tinct. belladonna, half an ounce; the hands to be rubbed several times a day with this.

Our Bookshelf

"Reading maketh a full man."—*Bacon.*

A BOOK ON DRUNKENNESS.

Inebriety: Its Etiology, Pathology, Treatment, and Jurisprudence. By Norman Kerr, M.D., F.L.S., &c. (London: H. K. Lewis. 1888.)

FIRST NOTICE.

This bulky volume is the outcome of much patient research into the causes of drunkenness and of much practical experience in the treatment of that disease. Dr. Kerr has for years been known as an indefatigable labourer in the cause of medical temperance—meaning by the latter term the recognition of drunkenness as a true disease, caused by certain conditions, mental, physical, or both, and largely susceptible of cure by the use of appropriate remedies. Added to these phases of scientific temperance is that which advocates the treatment of disease without having recourse to alcohol. With this latter phase of the subject we confess to having a strong, but not absolute sympathy. In the hands of a physician—as proved by Dr. Collie, for instance, in connection with Fever Hospital researches—alcohol may prove a most useful article of the *materia medica*. Contrariwise, one must allow that alcohol, even as a medicine, has been abused, and the protests and work of Dr. Kerr and others have not been without use in showing how much may be done by therapeutics *minus* alcohol altogether.

Inebriety, in the words of Dr. Kerr, "is a disease, as curable as most other diseases, calling for medical, mental, and moral treatment." This is the keynote of Dr. Kerr's volume, and, it must be confessed, his standpoint is of thoroughly rational kind. So long as the drunkard is esteemed merely as a kind of social waif, who, through the existence of some moral twist in his nature, is in danger of rapidly going to the bad, so long inebriety cannot, and will not, be successfully treated. There is a close parallelism to be seen, in our opinion, between the modern treatment of insanity and that of inebriety. We have now come to see very fully and clearly that an insane man suffers from some form or other of nervous disease. The physician may not, it is true, be always able to place his finger on the affected centre or to show under the microscope definite results of his post-mortem examination. But that the insane patient has succumbed to a definite physical lesion or affection of his nervous centres is none the less an absolute truth. People who not so long ago used to speak of insanity collectively as a "disease of the mind" were simply doubling a difficulty which before was single, and translating the practical, every-day disease in terms of a transcendental and theoretical idea. So is it with drunkenness. To-day we have at last recognized the truth that a man or woman who gives way to drink is to be regarded as a doctor's patient, and as such to be treated by drugs, by operation, by hygiene, and by moral means as well. As often as not a well-defined, but often hidden, cause exists for the inebriety, and that cause is to be discovered by the physician. This view of things satisfactorily disposes of the theoretical philanthropy which used to see in a drunkard only a case for moral suasion. The old teetotal panacea of a "pledge" and its effects in reclaiming the soddened tippler is laughed to scorn by the newer and sounder philosophy which sees in such a perversion of humanity a form of disease to be treated

towards recovery intelligently, precisely, and as a matter of medical detail. How much more hopeful the case of the drunkard becomes under the new *régime* may be readily conceived. At least, he has a fair chance of rational treatment to-day, whereas in past years, as often as not, he was left to wallow in the Slough of Despond into which he had been driven or been led.

Perhaps the most intelligent fashion of arriving at a fair conception of Dr. Kerr's volume and its value is that of first of all dealing with his remarks on the causes (or etiology) of inebriety. There is a wide field for observation under this latter head. As usual, statistics help us greatly in arriving at just conclusions. In detail, Dr. Kerr traverses the various sorts and conditions of men and women who are prone to drunkenness. The males, first of all, as regards *sex*, would appear to far outweigh the females in respect of numbers. Between November 1, 1879, and January 1, 1881, at one Retreat in New York, the 600 cases treated gave 507 males and only 93 females. In England, between 1881 and 1887, 314 patients were received into licensed Retreats for Drunkards, and the proportions here, Dr. Kerr says, are about 261 males to 53 females. In Austria there are very few women inebriates, but many male drunkards. Up till 1887, Dr. Kerr, tells us, however, a very much more limited provision for females was made in licensed homes than for males—the proportion being as 18 females to 52 males. But in unlicensed homes there is much greater accommodation for women than for men. Our author, indeed, sets the proportion down under this latter head as 240 females to 30 males. This fact would appear to point to the existence of a much larger proportion of female inebriates than the foregoing figures show, and also to the fact that such patients are treated in unlicensed homes, probably to avoid publicity. Yet in the Colonies the proportion of male to female admissions to officially recognized homes is as 5 to 1.

Then as to *age*, the period of life between 30 and 40 would appear to be that most marked by the invasion of inebriate habits. This is true both of British and American facts. One distressing phase of the age-question is that of juvenile inebriety. Dr. Kerr points out that actually "boys of 7 years old and upwards have been treated for delirium tremens, and cases of repeated intoxication have occurred at as early a period of life. Even in much younger children," he adds, "I have seen the disease manifest itself." In such cases it is difficult to avoid the idea that inheritance of drunken habits must prevail as a cause of such early inebriety. Dr. Kerr evidently argues from some such standpoint, since we find him speaking of "the latent tendency to intemperance" which lurks in such cases, and is excited to activity by "a sip of an alcoholic intoxicant."

Religious belief at first sight appears far removed from the actual condition of inebriety, yet Dr. Kerr is wise in collating statistics on this head; since light is often thrown on the problems of physicial life by a consideration of questions and conditions of social life. Thus, Jews put to open shame both Protestants and Roman Catholics in the matter of intemperance. Dr. Kerr has never been consulted in a case of Jewish inebriety, large as his experience undoubtedly has been. Among female Roman Catholics there has "been of recent years an alarming rate of increase of inebriety." Yet, as far as the inculcation of temperance principles are concerned, we apprehend the Romish faith has not been behind Protestant creeds in its denunciation of inebriety. Among educated women, Dr. Kerr tells us, of the Roman Catholic creed, the habit is spreading, and this fact should certainly arouse the increased vigilance of the moral and religious agencies at the command of that Church. The Jew, as our author points out, is a natural sanitarian. A careful liver in all things, he reaps the benefit of his hygienic life by exhibiting a less natural tendency to inebriety than the people of other religions. Herein is included a powerful lesson for temperance reformers. That by improving the general conditions of life and health, the craving for drink may be largely arrested seems to be a very patent fact in the social history of mankind.

The influence of *race* is very marked as a condition of inebriety. Italians and then Spaniards are said to exhibit a comparative freedom from intemperance. The Red Indian very speedily becomes demoralized. A primitive race succumbs to alcohol as readily as to the scarlet fever or small-pox, to which before its blood has been a stranger. The Anglo-Saxon race appears to be more prone to inebriety as a disease than any other. It is possible that the high nerve-strain exhibited by this race may have much to do with the initiation of the habit; but it is evident the Anglo-Saxon people have a tolerably long history of drunkenness as a constant condition of their life, and that heredity thus works out its unfailing law in the matter of greater susceptibility to alcoholic indulgence.

Climate, as a condition of inebriety, forms of itself an interesting study. Dr. Kerr accords to it a high rank among the influences which affect drunkenness as a disease. Thus, fog, damp, and east wind injuriously affect inebriates, probably by depressing, or, in the case of east wind, unduely exciting a paroxysm. The influence of the seasons is variable on drunkards. The brighter atmosphere of the United States has its own share in increasing nervous tension, and in inducing inebriety. Contrariwise, our damp, wet English climate acts in similar fashion by calling for a stimulus to relieve the nervous oppression. In this connection Dr. Kerr adds that he has "known crimes of violence to be committed in the United States under the influence of strong drink," but adds that he has "never, when there, heard of such brutalities as roasting a wife alive, and persistently dashing a child's head against a wall, of which we hear too often in our own country." Hot climates are not, on the whole, so prone to engender inebriety, as are cold climates; but Italians, thoroughly temperate at home, have succumbed in England to the vice. Our author adds that omnibus drivers, who are heavy drinkers, do not suffer to any extent from nervous diseases or from true inebriety. He attributes this fact to the circumstance that these men spend their lives largely in the open air. They may suffer from gout, dropsy, and other affections, but do not, as a rule, develop drunkenness as a disease. Here the influence of climate modifies "the action of the poison on the individual."

An element of danger, in our houses, is involved in burning of gas made from *common* coal instead of *cannel* coal. This has been pointed out by Dr. Wallace, one of the city analysts of Glasgow, in a lecture delivered by him in 1879. He showed that this gas contains double the volume of sulphur which is found in the pure cannel coal gas. A much larger quantity of it requires to be burned to give the same light. This sulphur, in burning, produces sulphurous acid, which in time changes to sulphuric acid or vitriol. Thus not only life is endangerd, but the furniture and fabrics in the apartment become damaged.

IMPORTANT ANNOUNCEMENT.

COMMENCEMENT OF A NEW VOLUME OF "HEALTH."

HEALTH, as our readers are aware, may be obtained of all Booksellers and Newsagents, and at the Railway Bookstalls, on the day of publication. It may also be ordered from the PUBLISHER, 2, Paternoster-square, London, E.C., who will send the journal, post free, for a year, on receipt of postal orders for 10s. 10d.

As many of our readers who live in remote districts prefer to obtain HEALTH from the Publisher direct, and as we are desirous of increasing the already large number of subscribers who give us a yearly order for the journal, we take the opportunity afforded by the COMMENCEMENT OF A NEW VOLUME to offer the following FREE GIFTS and BONUSES to all who subscribe to HEALTH for one year or longer, on and after FRIDAY, APRIL 6TH, when the first number of Volume XI. will be issued :—

(1.) To each Subscriber who remits 10s. 10d. to the Publisher, entitling him (or her) to receive one copy of HEALTH, post free, for one year, we shall present a copy of Dr. Andrew Wilson's work, entitled "A Manual of Health Science" (Longmans & Co.), value 2s. 6d.

(2.) To each subscriber who remits 21s. 8d., entitling him or her to receive two copies of HEALTH weekly, post free, for one year (or one copy for two years), we will present Dr. Richardson's "Ministry of Health" (Chatto & Windus), value 6s. The copies of HEALTH so ordered may be posted to separate addresses.

(3.) To each person who subscribes 32s. 6d., for three copies of HEALTH, post free, weekly, for one year, we will present the volume by Dr. Richardson mentioned above, and also the handsome, illustrated book entitled, "Studies in Life and Sense," by Dr. Andrew Wilson (Chatto & Windus), value 6s.—being a free gift of the total value of 12s.

The bonus last mentioned will also be presented to anyone who succeeds in obtaining three yearly subscribers to HEALTH, and who remits to the Publisher the sum of 32s. 6d., together with the names and addresses of the persons to whom the copies are to be posted each week.

As the literary gifts above-mentioned constitute books containing solid and reliable information regarding health and other matters of popular scientific interest, it will be seen that the above scheme, while intended to increase our already large circulation, also offers distinct advantages to new subscribers who guarantee by their subscriptions a year's support to this journal. All communications regarding subscriptions and other purely business details connected with HEALTH should be addressed directly to the PUBLISHER, 2, Paternoster-square, London, E.C., and *not to the Editor*.

CLEANING BRASS.—It is a great mistake to clean brass with acid. It very soon becomes dull after such treatment. Sweet oil and putty powder, followed by soap and water, is one of the best mediums for brightening brass or copper. To frost brass-work, and give it an ornamental finish, boil the article in caustic potash, rinse in clean water, and dip in nitric acid till all oxide is removed; then wash quickly, dry in warm boxwood sawdust, and lacquer while warm.

Our Letter-Box

"Conference [maketh] a ready man."—*Bacon.*

NOTICES TO CORRESPONDENTS.

All Communications for the Editorial Department (including Books for Review, Specimens of Sanitary Appliances, &c.), to be addressed to "THE EDITOR OF HEALTH," 2, PATERNOSTER-SQUARE, LONDON, E.C. *Those intended for the Publishing Office to be sent to* MR. A. P. WATT, THE PUBLISHER, *at the same address.*

RULES FOR CORRESPONDENTS.

OWING to the mass of letters which reaches us each week, we respectfully direct the attention of Correspondents, desiring replies in the LETTER-BOX DEPARTMENT of HEALTH, to the following rules :—

1. All questions are answered free of charge in the columns of HEALTH.
2. All letters must be legibly addressed to "The Editor of HEALTH, 2, Paternoster-square, London, E.C.," *and to no other address.*
3. Questions to which answers are desired by post, are so replied to solely at the Editor's discretion. If no answer is sent by post, the query will be replied to in the "Letter-Box" columns of HEALTH. A stamped addressed envelope must accompany all queries to which a private reply is desired.
4. Addresses of physicians and surgeons will, as heretofore, be forwarded FREE to Correspondents on their enclosing a stamped addressed envelope for reply.
5. Correspondents are requested to write on one side of the paper only, and to make their inquiries as brief as may be consistent with clearness.
6. From the necessity of sending HEALTH to press early in the week, no Correspondent can be replied to in the "Letter-Box" columns in the same week in which the inquiry is received. Replies crushed out of any issue will be found in the succeeding number.
7. No Post Cards must be used in sending queries. Violation of this rule deprives the sender of the privilege of a reply.

NERVOUS EXHAUSTION.

PULVERMACHER'S World-Famed GALVANIC BELTS for the Cure of NERVOUS EXHAUSTION and DEBILITY, have received testimonials from three Physicians to Her Majesty the Queen, and over Forty Members of the Royal College of Physicians of London.

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LETTERS TO THE EDITOR.

TOBACCO AND EYESIGHT.

SIR,—Does tobacco smoking injure the eyesight? The disease known as *toxic amblyopia* was at one time thought to be a product of alcoholic indulgence, and was known as *amblyopia potatorum*, but great as are the evils wrought by the use of intoxicating drink, further investigation shows it to have been wrongly accused. The mischief is wrought by tobacco, and alcohol acts only an auxiliary part. What then is *toxic amblyopia?* Dr. C. S. Jeaffreson, the senior surgeon at the Newcastle Eye Hospital, has given a very good description of its general symptoms:—Tobacco amblyopia is, I regret to say, a very common malady in this district; there are few weeks that I do not see one or two such cases. The subject of it is usually a man of middle age, and he complains of a rapid loss of sight, apparently without any rhyme or reason, occurring, perhaps, in a few weeks or months. It is surprising how healthy many of these patients look, and they will tell you that their general health is perfect; but a closer examination will usually detect some flaws, such as loss of appetite, bilious derangement, and not unfrequently nervous dyspepsia. Now, the form of blindness is very peculiar, and it affects chiefly the central part of vision—that part which immediately lies at the yellow spot—and it also very seriously interferes with colour perception, especially that for red and rays lying near them in the spectrum. This leads to the very curious fact, that most of these persons observe that in the early stage they have been unable to discriminate between gold and silver coins, and have made sometimes serious mistakes in giving change. You will see the grave import of a correct appreciation of these cases, and to what danger they may give rise when the sufferer has to deal, as in the case of railways and ships, with coloured lights used as signals. The influence of tobacco in the production of colour-blindness is one of great practical importance. In the course of a year not only many thousand pounds worth of property, but millions of human lives are entrusted to the keeping of men whose ability to discharge their duty efficiently depends upon the possession of sight so true and keen as to enable them readily to discriminate the exact colours of danger and safety signals. Should any railway servant, honestly desirous of doing his duty, venture upon a purely sensual indulgence, that may result in the wreck of a train and the loss of human lives? Perhaps the smoker to whom the safety of others is committed may say, "There is no danger in my case, for I have smoked for many years, and my power of telling one colour from another is as good as ever it was." This is a dangerous fallacy, for toxic amblyopia is the result of progressive tobacco poisoning, and it appears suddenly and without warning, and "*there is no chance for these patients unless they entirely and completely drop the use of tobacco.*"

The central tract of the optic nerve is specially susceptible to the influence of tobacco, which "is the essential agent in causing an axial neuritis which does not in ordinary cases tend to spread to the nerve-fibres coming from the peripheral retinæ." It is a remarkable fact that no agent other than tobacco has yet been proved to cause axial neuritis in any series of cases arising among those who are strictly non-smokers. The toxic influence of the tobacco often makes itself felt when the power of resistance on the part of the human system has been reduced by alcohol, mental distress, starvation, or other disturbing causes. Some persons inherit a tendency to certain forms of degeneration in the organ of sight, and this tendency is increased and hastened by the use of tobacco. Although it is sometimes said that moderate smoking is not injurious, yet, as a matter of fact, the powers of resistance to the poisonous constituents of tobacco varies so greatly amongst different individuals that no quantitative definition of moderation is possible. One of the amblyopic patients of Mr. Edgar A. Browne, of Liverpool, began to smoke at the age of nine, and habitually smoked six or seven ounces of twist weekly, whilst another consumed not more than one ounce. The most important and hopeful fact of all is that unless the disease has made great progress, the only condition necessary for perfect recovery is total abstinence from tobacco. These facts are worthy the serious consideration of all. The common health, it has been well said, is the common-wealth. Tobacco is so commonly used that its deleterious influence upon the physical well-being of the population is apt to be overlooked. There are many persons at this moment whose failing sight is a hindrance alike to pleasure and to the usefulness of their lives, and who are quite unconscious that the mischief is due entirely to the habitual pipe which they cherish as a friend instead of discarding as a stealthy and insidious foe. Hence the importance of spreading exact and reliable information. In this country it is safe to say that toxic amblyopia is a disease confined to smokers, and that it can be cured by complete abstinence from tobacco, and by that alone.—I am, yours, &c.,

NERVE.

[Replies from various medical men on the subject of Tobacco and its influence on the Eyesight will appear in our next issue.—ED. H.]

OVER-POPULATION.

SIR,—The question of "over-population," which you treated so ably a week or two ago in HEALTH, is one which, ere long, will force itself upon us whether we will or no. With the exception of a very small percentage of carefully hedged-in lives, all who have attained years of discretion know how serious a matter "over-population" is becoming. Yet it is seldom discussed with common sense. Whatever opinion a man or woman may hold, the quiet, kindly, yet sensible argument is shirked; a so-called false modesty prohibits any plain statement of facts. That the matter has already gone too far, can any thoughtful person deny? Alike it affects both men and women; and bad as it is now, it will in the next twenty years be a thousand times worse. Under existing circumstances, social reformers may well ask whether improved education is a blessing or the opposite. A few examples may advantageously be shown; and, pity is, they are found on every side. Take a couple of the better-educated middle class, possessed of, say, £150 to £200 a year. So far as they are concerned, this income is sufficient for comfort. But a constantly-increasing family appears, and, as a result, increased cares, expenditure, and anxieties accrue. The father loves fondly both wife and children. Had he the means, how thankfully would he provide comforts for all, how fondly cherish his wife, how carefully train and educate his children. Only when too late does he realize the evil. To put the matter plainly, he can but provide the bare necessaries of life. The only means of education at his disposal will be such as a sensitive, refined disposition will shrink from; yet there is no help. The most sordid ideas flit through his brain. Anything to protect and to keep the dear ones from want. He will undertake more work—and considers himself fortunate in getting it. For a little while things are improved—only for a little while. The long stretch of anxiety, extra work, increased age, fewer comforts—each and all tell their own tale mentally, as well as physically. A breakdown comes—a year of partial, alas! it may be, total, suspension of work. What visions of torture pass through his overworked brain.

Economists may talk as they will, there are thousands of cases where saving, except to a very small extent, is impossible. A certain outlay, a certain keeping up of appearances, is necessary to insure the income; and all that is *gained* is the mere living. Can we wonder that health, mental and physical, gives way? Should recovery take place, it too often happens that position and means of making a living are both lost. For one position vacated thus, hundreds of new beginners are waiting. What follows we can all imagine; and this is no ideal sketch, but a fact we may see verified every day of our lives. Bad as it is for a man, I am inclined to think this living at high pressure is worse for a woman. How many are there possessed of that amount of robust health and strength that their manifold cares and duties require. The life of love and sympathy together with an average proportion of comfort which they had pictured, becomes altogether a myth. Hard work, anxiety, and ill-health will tell before long on the sweetest and best disposition in the world if not accompanied by an almost lion constitution and indomitable courage. Imagine, if it be possible, the actual amount of work and thought involved in such a position. Imagine the dearest hopes of life shattered, and no means whatever of regaining what is gone for ever. Some may say I am pleading for individuals only, but what is true of the individual is true, with slight differences, of the nation at large. Increased income in many cases only means increased liabilities. The question that arises then is, shall we, as straight-laced prudish moralists, let our sons and daughters grow up in ignorance, and face, by their own sad experience, that evil which we know is coming upon us; or shall we sacrifice our selfish scruples, and taking a far higher standpoint of morality, face the question boldly. Right-minded, thoughtful men and women will not hesitate to choose in respect of the most important problems of the times. The valuable health knowledge spread so widely will then become a boon to all. With a less increasing population we may have healthier lives, increased comfort, a less keen fight for bare subsistence. There will be a wider sympathy amongst all classes of society; also, last, but not least, there will be some amount of leisure for all, out of which will grow a goodness of life and a far higher morality than can ever be hoped for in our present state of hurry-scurry.—I am, yours, &c.,

A LADY.

QUERIES AND ANSWERS.

REPLIES: GENERAL, SANITARY, AND MEDICAL.

[Readers of HEALTH will kindly note that when back numbers of the journal are desired, the letters containing such requests and stamps for the numbers should be addressed to the PUBLISHER of HEALTH, 2, Paternoster-square, London, E.C., and *not to the Editor.*]

Alpha.—1. You had better leave the scar alone. Nothing can be done for such marks. 2. Bathe the part in cold water each morning in which Tidman's Sea Salt has been dissolved; or try douching it by playing hot and cold water alternately on the part each morning. An elastic anklet might help you, such as any surgical instrument maker can fit you with.

R. R. S.—We should say not. Read the pamphlet, "A Lecture to Young Men" (post free for 1s. 1d. from Mr. Renshaw, 356, Strand, London, W.C.), and note what is therein said about general health-rules in cases like yours.

Kelso.—There exists, evidently, some irritation of the kind named by your medical attendant, and such irritation is probably aggravated by the special condition of the patient at the present time. In such cases, the sheet-anchor of treatment is rest in bed or on a sofa, together with the administration of sedatives; but, under the circumstances, we think it would be advisable to consult a specialist in such ailments in your nearest city. Such advice would be valuable, if only by way of guarding against future ailment. Send us stamped addressed envelope, and we will forward address of an Edinburgh specialist.

Hopeful Thomson.—Read the pamphlet recommended above to "R. R. S.," and you will find full information therein given regarding your case. If you wish address of a physician, attend to rule 4 to correspondents.

Twinkle.—Cases like yours always benefit from a thorough change of air. In your holidays, go away from home, and stay on the East Coast of Scotland (*e.g.*, North Berwick), or try Scarborough, or Whitby, or if you care to go further south, try Margate or Ramsgate. We should also advise you after your meals to take cod liver oil combined with syrup of the iodide of iron—three drachms of the iron to six ounces of the oil and one ounce of mucilage—your druggist will make up this for you. Take a tablespoonful of this, after meals, thrice daily. Try, also, what inhaling Stern's Pumiline at night will do for you—see description of this remedy in Health, No. 252. If not cured, write again.

G. Chisholm.—The Coca Cigarettes should be tried by you—see advertisement in our pages. They contain no nicotine.

R. Lampard.—A "capillary" is one of the smallest blood-vessels in the body—the average diameter is $\frac{1}{3000}$ of an inch.

Lesbia.—About thirty years, we fancy, although authorities differ on the subject.

Peter G.—Belladonna often produces a rash like that of scarlet fever in appearance. It is therefore possible this fact may explain your difficulty.

Albert Frame.—Use the following:—Bay rum, two ounces; glycerine, two ounces; tincture of cantharides, one drachm; oil of bergamot, half a drachm; sulphate of quinine, ten grains; water, four ounces. To be used every morning, and to be rubbed into the roots of the hair, all other oils and pomades being avoided. Use a soft brush only, and wash the hair once in a week or ten days, at night, with Bayley's Soap and tepid water. Keep the hair short for a time.

A Glasgowegian.—Try a belladonna suppository, containing a quarter-grain of belladonna, at night. Internally, take twenty grains bromide of potash in water twice daily, between meals so long as your symptoms last.

T. Fullagar.—You take far too much tea. Give up tea at night entirely, and substitute Van Houten's Cocoa instead, and you will probably find your symptoms will disappear.

Ovor.—Read the pamphlet, "A Lecture to Young Men" (post free, for 1s. 1d., from Mr. Renshaw, 356, Strand, London, W.C.), and note its advice as regards diet.

Formby.—Try the effect of taking twenty drops of Cascara Cordial in water an hour before your breakfast, and repeat the dose, if necessary, in the afternoon. This will remove the constipation. As to diet, give up tea and coffee, and for breakfast and supper substitute Grant's Oat Flour. For the rest, let your diet be light. Take as much open-air exercise as possible.

Mark L.—Apply a little black wash on cotton wool to the parts, keeping the cotton wool always moist. Internally, take a dose of Lamplough's Pyretic Saline occasionally.

Householder.—Try Twyford's National or Unitas, which is made in one piece, and easily cleansed.

Fortur.—Use a belladonna suppository containing a quarter-grain of belladonna at night. Internally, take twenty grains bromide of potash in water, twice daily.

M. A.—Take the following tonic: Citrate of iron and ammonia, one drachm; syrup of orange-peel, half an ounce; water, eight ounces. Mix. Label: "Two tablespoonfuls to be taken thrice daily, before food."

TO THE READERS OF "HEALTH."

The extraordinary statements of General W. F. Nuthall, Captain J. Paige, Rev. C. G. Squirrell, Rev. James Brierly, M.A., J.P., and other prominent men that have appeared in these columns in the past, have not only attracted much attention, but have awakened doubts in the minds of some as to their genuineness. They were, however, correct in every particular, as the following local statements amply confirm:—

244, Brockley-road, Brockley, S.E., Nov. 25, 1887.—I feel it my duty to write and thank you for the bottle of Warner's Safe Cure which I was persuaded to try, suffering as I have done for so long a time from indigestion and other complaints caused by a sluggish liver and disease of the kidneys. I had tried nearly all the remedies advertised without any good effect, and I am grateful indeed to my friend who recommended me to try Warner's Safe Cure, for after taking only one bottle, I can truly say that I was astonished at its quick efficacy: it took away all my pains, and I feel quite another being. I have, and you may depend shall continue, to press all my friends suffering from the liver and complaints of the kidneys to take that medicine. You can make what use you like of this letter, as I am grateful to you for producing such medicine, which gave me the relief I had been seeking without avail for so long a time, and I can only hope that all suffering from the complaints named will be induced to try it.

(Signed) J. Prior.

40, Haymerle-road, Peckham, London.—I have long been suffering with gravel, for which I have tried many remedies, but derived no special benefit. I also consulted a noted specialist for the bladsage of gravel, and resulting in stone in the bladder. Two years ago I was obliged to undergo an operation, and had a very large stone taken from me, which gave me temporary relief; but the gravel kept passing and accumulating as formerly, the pains in the region of the loins and back were frightful, and I wasted away to a mere shadow, having when in health weighed 11 stone. I could not find any permanent relief until I commenced taking "Warner's Safe Cure," which was recommended to me. Under its use I soon began to pass stones, of which some ten to fifteen large ones have come away, with a large quantity of gravelly sediment. The pains ceased, and I began to gain flesh after the first bottle or two. I consider the change a miraculous one, and my doctor compliments me on the wonderful way I have recovered since taking the "Warner's Safe Cure." My husband is so pleased with the good the medicine has effected in my case that he is recommending it to everyone he meets. Rose Pendall.

Statements like the foregoing are certainly conclusive evidence of the wonderful merits of this remarkable medicine. No better verification of its purity and power can well be asked. The above testimonials are not from unknown and obscure persons, residing in distant parts of the kingdom, but are the voluntary statements of neighbours and friends living in your own locality, the truth of whose assertions can be easily verified. Are not such proofs sufficient? We can show thousands of similar testimonials from people all over the world. Shake off prejudice! Use the favourite remedy—Warner's Safe Cure—and enjoy health. For sale by all medicine vendors throughout the world, at 4s. 6d. per bottle, or can be had direct of H. H. Warner, 86, Clerkenwell Road, London, E.C.

Charles Macpherson.—Take a little Æsculap Water each morning for a time, and if the constipation continues, make your diet to include farinaceous materials, *e.g.*, Scott's Oat Flour and stewed fruits. Rest after your meals.

Nobilis.—Try the effect of taking the following pill: Powdered ipecacuanha, half a grain; powdered capsicum, one grain; powdered rhubarb, two grains; extract of gentian, three grains. Six such pills to be made, and one to be taken half an hour before dinner when there is any liver irritation.

A. P.—Inhale, at bedtime, the vapour of a pint of hot water to which a little of Stern's Pumiline has been added. After your meals, take a dessertspoonful of Scott's Cod Oil Emulsion with Hypophosphites, thrice daily, as a general strengthening measure.

Childie.—Take a pill containing one grain permanganate of potash, to be made up with Kaolin. Take one of these pills twice daily, after your food, before the period named, and let us hear the result after a brief trial of this remedy.

Loxa.—Read the very full article on how to treat "Blackheads" in Health, No. 199, which may be had from the Publisher, price 2½d., post free.

Feat Lear.—The water you send requires filtration. Use one of Howie's Filters (Hurlford, Kilmarnock, N.B.), advertised in our pages, as a simple and effective appliance.

Butler.—Wash the parts night and morning with Carbolic Soap and tepid water, and dust on the parts thereafter a little Fuller's Earth. If this does not cure you, substitute for the Fuller's Earth a lotion composed of carbonate of soda, one drachm; glycerine, an ounce and a half. Apply this to the parts. See, of course, to the cleanliness of your underclothing.

Foley.—Use Stern's "Pumiline" as an inhalation for colds. See full notice of this remedy in Health, No. 252.

Charles O. F.—Take a claret-glass of Vin Mariani (Roberts & Co., New Bond-street, London, W.) before your meals, twice or thrice daily, as an excellent tonic for your case; and try a cold or tepid sponge bath each morning.

P. B. Grant.—We should advise you to take the Fer Bravais in fifteen-drop doses, in water, after your meals, twice daily; and try the following as a cure for boils: Sugar of milk, half an ounce; sulphide of lime, twenty-four grains; mix, and take five grains, or as much as will cover a sixpence, every four hours.

Trooper.—Try hot and cold douches played alternately on the strained part, twice or thrice daily; and wear, if possible, a Martin's bandage at night.

Percy G.—Cold sponge bath (not wetting the head) each morning is preferable to all other modes of bathing.

Ellen Rae.—Dr. Andrew Wilson's "Manual of Health Science" (Longmans, Green & Co.), or Dr. George Wilson's "Manual of Hygiene" (Churchill & Co.), may suit you. The book on "Healthy Houses," by the latter author (Churchill), is also a popularly-written work.

Rexa.—Give up the use of the appliance for a time, and wash the parts with Bayley's Soap, dusting on a little Sanitary Rose Powder (Woolley's) after washing. Keep your mind quite easy, and attend to your general health and diet as directed.

Mary L.—Brush the teeth morning and night with a soft brush and Dr. Pierre's Teeth Preparations. After smoking, wash out the mouth with Dr. Pierre's Eau Dentifrice.

B. C.—Try the effect of taking twenty drops of Cascara Cordial in water an hour before your breakfast, and repeat the dose, if necessary, in the afternoon. This will remove the constipation. As to diet, give up tea and coffee, and for breakfast and supper substitute Scott's Midlothian Oat Flour. For the rest, let your diet be light.

John Player.—Wash your head once a week with tepid water and Bayley's Spermaceti Soap (17, Cockspur-street, Pall-mall, London, S.W.), and rub into the hair roots each morning a little glycerine and borax. Avoid all hard brushes and small combs.

A. K.—There is nothing better than Lamplough's Pyretic Saline. Take it daily for a time as directed on the bottle.

Certain HARNESS' Cure.
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SLEEPLESSNESS.—The Rt. Hon. Lord Byron says that—"Harness' Electropathic Belt is invaluable for sleeplessness, I recommend it to all my friends."
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Only Address,
52, OXFORD ST., LONDON, W. (Corner of Rathbone Place.)
Call to-day, if possible, or write at once

W. F.—Give Dahl's Cakes (advertised in our pages) a fair trial for the cure of constipation. They have acted very successfully in many cases which have been reported to us.

Martin B.—For acidity after meals, take one or two of the Vichy Pastilles. These will correct the acidity; but you must exercise great care in diet.

North Pole.—Inhale, at bedtime, the vapour of a pint of hot water to which a teaspoonful of Friars Balsam has been added. After your meals, take a dessert-spoonful of Scott's Cod Oil Emulsion with Hypophosphites thrice daily, as a general strengthening measure.

Marco.—Apply to Messrs. Burroughs, Wellcome & Co., Snow Hill-buildings, London, E.C., for the information you seek respecting the inhaler.

A. Blanc.—Read Dr. Murrell's book on "Massage" (3rd edition), published by Mr. H. K. Lewis, Gower-street, London, W.C. Apply to Mrs. Maitland, 6, Grosvenor-street, London, W., for practical advice.

Copsley.—1. Order from your bookseller Ebstein on "Corpulence," and read the review of this book published in Health, No. 57, which may be had from the Publisher, post free, for 4½d. The review of this book will show you its principles, which are very practically stated, and will give you its publisher's name. Order through any bookseller if our review is not sufficient for your purpose. The diet-tables by Dr. Philpott, published by Messrs. Sampson Low & Co., 188, Fleet-street, London, E.C., will also aid you. 2. The patient should be sent to the seaside, or to the country; should have generous diet, plenty of fresh air; and take twenty drops of Fer Bravais after meals twice daily. Bokōl should be taken as a beverage at dinner daily as a nutritive malt extract.

P. Z.—1. The best work on consumption is that by Dr. Williams, published by Longmans & Co., 39, Paternoster-row, London, E.C. The publishers will afford you all information regarding the work in question. 2. We should say Ventnor, on the whole.

E. F.—Use the Vin Mariani (Roberts & Co., 76, New Bond-street, London, W.), and take a wineglassful of this wine after meals thrice daily.

C. Parker.—Dahl's Cakes (advertised in our pages) should be used by you for constipation.

Scutum.—1. Simply apply it with a brush and water, like an ordinary tooth-powder, or try it dissolved in water as a mouth-wash. 2. Yes: may safely be tried.

W. B.—You can only form an idea by studying the child's faculties and abilities as you see them exemplified in early life. At the same time you should bear in mind that it is often impossible to determine a child's proclivities. Better wait until the child has attained the dignity of youth, and then note his leanings towards any special branch of study or trade.

Uneasy.—Try the effect of applying the ointment recommended to "Nox" in Health, No. 261, and if not cured, write again. Take a hot bath twice a week, and use Bayley's Spermaceti Soap.

B. B. A.—1. Try the "Unitas" (Twyford's) pattern. 2. Marshall's Tritola. 3. In the vertebra itself.

Notice to Ladies and Housekeepers.—Borwick's Baking Powder is guaranteed entirely free from alum—a cheap and highly injurious article frequently used in low-class baking-powders, which are retailed either by weight or in large tempting penny packets, and should be strenuously avoided.

C. L. Hancock.—You are only over-excited, and do not suffer from any actual disease. Read the pamphlet, "A Lecture to Young Men" (post free for 1s. 1d. from Mr. Renshaw, 356, Strand, London, W.C.), and follow out the directions regarding diet, cold sponging, &c., therein given. You will get quite well by attending to this advice. Take plenty of open-air exercise, and beware of quacks.

Unus.—There is nothing wrong, save, perhaps, some very slight local irritation at the part named. We advise you to drink Vichy Water occasionally and to avoid all rich and indigestible foods (*e.g.*, cheese, pastry, and salt meats), while it is probable you may benefit largely by taking a tea-spoonful of Syrup of the Hypophosphites in a wineglass of water, after your meals, twice daily. If not bettered, write again.

J. R. H.—1. Bathe the parts with cold water regularly, and wear a suspensory bandage. 2. You should consult a surgeon, who will fully advise you. He will be able alone, on seeing you, to state whether or not an operation may be required, and he may be possibly able to relieve your case without operation at all.

Kappa Delta.—Such cases are not uncommon, and are familiar enough to medical men. They depend upon a constitutional peculiarity, which, as a rule, gives no trouble, and for which medical treatment is not usually required. In the case you name we should advise you to look well to the patient's general health, and, if possible, try the effects of change of air. You might use a very weak solution of Condy's Fluid (say half a teaspoonful to a tumbler of warm water), and use this as an injection to the nostrils when the symptoms are troublesome. For the rest, let Nature take its course, especially as there is no pain. Medical aid should be sought if pain or other serious inconvenience arises.

Ex-Hussar.—If you are not allowed to take ordinary sugar, why not try the Saccharin, which is safely taken by those to whom sugar itself is forbidden. Messrs. Burroughs, Wellcome & Co.'s Saccharin tabloids should be tried (to be had of any good druggist, or from Snow-hill, London, E.C.). These tabloids can be used to sweeten tea, coffee, and other articles. Why not try Scott's Midlothian Oat Flour, with the occasional use of Cascara Cordial (twenty drops in water once daily, between meals) when the apples fail you? The pippins may be somewhat sweet for your case, it is true, and had better be avoided. Other kinds, however, are to be purchased.

W. R——d.—We are afraid you have no great patience with any one remedy. You must persevere with the treatment last ordered. Your cure will consist largely in proper diet, rest after meals, and plenty of open-air exercise. Try the effect of taking a pill containing one grain sulphate of quinine (which your druggist will compound for you), an hour before dinner, for a few days.

Bomba.—1. Possibly, if the tooth induced general irritability. 2. No; the cause is more likely to exist in some derangement of digestion. Look to your food, avoid excess of starchy articles of diet, and drink a tumbler of hot water at bedtime for a few nights. After meals, try fifteen drops of Fer Bravais in a little water, twice daily. 3. Nature will herself accomplish what is needed, but read the pamphlet recommended to "R. R. S." in the present number for full information on the point you name.

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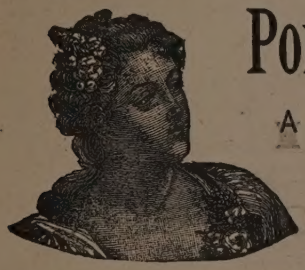

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